



Assignment Module 3

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Topic:
Capstone Project IMPACT 360

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PhD Portfolio Program

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Task –Develop new ideas or processes at the forefront of work

In this module students will scaffold the work they have done in Modules 1 and 2 to create something entirely new for their organizations. The idea here is to be creative or innovative and to find ways to reinvent part of or the entirety of the organization. The idea needs to be genuinely disruptive so that it would create a dynamic of real change in the organization. Students need to consider their proposals on a micro and macro level, taking into consideration potential reactions from all points of the business as well as effective ways to manage those reactions. Students should focus on and demonstrate knowledge of what is happening in their industries, current and anticipated trends etc. Attention should be paid to significant themes like sustainability and the environment, global political situation, technological disruption and business in the second part of the 2020s, bearing in mind lessons learned during and after the Covid-19 pandemic.

This proposal could cover:

A new product

A new way of working or a new process to make work more efficient

A new organizational structure

A way of using new systems or new technology

A plan to expand into new markets

A plan to create an entirely new business in a new market

A way to build resilience into the business to be ready for future crises.

Module 3 : Develop new ideas or processes at the forefront of work

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Executive Summary

The history of the industry provides a shocking trend that of the Fortune 500 companies listed in 1955, only 60 remained by 2017 (Perry, 2017). A striking 88% of these companies either went bankrupt, acquired, merged, or dropped from the top rankings by revenue. This dramatic turnover is emblematic of Schumpeterian creative destruction (Boehm, 2010), where waves of innovation continuously reshape industries. Emerging technologies, novel business models, and evolving processes render legacy approaches obsolete. While disruptive, this cycle fuels greater efficiency, catalyzes new sectors, elevates living standards, and propels global economic advancement.

This capstone project proposes a bold reinvention of Johnson Controls Digital's business strategy. By unlocking the full potential of the OpenBlue Platform, the initiative aims to deliver transformative, customer-centric innovations that redefine smart building experiences in the post-COVID-19 landscape- positioning Johnson Controls as a catalyst for digital disruption and sustainable growth.

This proposal outlines a multi-dimensional transformation strategy designed to position Johnson Controls Digital for sustained success. Key focus areas are:

- *Innovative Offerings*: Developing a new product or service that harnesses emerging technologies and market trends such as renewable energy integration, predictive maintenance & adaptive workspace solutions to meet evolving customer demands.
- *Agile Operation methods*: Implementing new processes that enhance operational efficiency, organizational agility, and enable more responsive decision-making.
- *Organizational Realignment and customer focus*: Restructuring teams and functions to better reflect customer priorities and market dynamics, while cultivating a culture of innovation, collaboration, and customer satisfaction.
- *Technology Adoption*: Adapting advanced systems, AI-driven analytics, intelligent platforms to elevate customer experience and accelerate innovation.
- *Driving Lifecycle business*: Expanding into new geographies and adjacent business segments to diversify revenue streams and extend Johnson Controls' impact for lifecycle business opportunity.
- *Resilience Building*: Embedding adaptive capabilities into the business to proactively manage future disruptions, ensuring continuity, flexibility, and long-term viability.

By aligning stakeholder interests, establishing robust governance frameworks, and leveraging Johnson Controls' resources and capabilities, this transformation will enable the organization to anticipate and respond to the region's evolving needs, driving meaningful outcomes for customers and communities.

Introduction

Johnson Controls, a company of nearly 140 years of existence, have been making buildings better every day. It uses industry-leading building automation and hyper-efficient heating and cooling systems to save energy and reduce emissions, making the world a better place to live.

Johnson Controls, a global leader in smart building technology, poised to expand its global reach with its innovative **OpenBlue software solutions**. It is JCI's passion to build smarter, healthier, and more sustainable tomorrows – for customers, communities, and our planet.



Asia-Pacific is a pivotal growth frontier for Johnson Controls, driven by rapid urbanization, economic expansion, and a rising demand for smart, sustainable, and health-conscious building technologies. As cities evolve and expectations shift, the need for agile, energy-efficient, and resilient infrastructure has never been greater.

To meet this moment of opportunity, Johnson Controls must cultivate a dynamic, collaborative decision-making framework, the one that harnesses the collective intelligence of stakeholders across the value chain, including building owners, facility managers, technology innovators, and policymakers. This collaborative approach is essential to co-creating solutions that address region's distinct challenges around sustainability, wellness, and operational efficiency.

In the traditional business model, Johnson Controls primarily focused on manufacturing and selling physical products, such as HVAC systems and BMS-building automation equipment. The value proposition was centered on the quality, reliability, and the performance of these products. Installation, maintenance, and repair services were typically offered as separate, often reactive, services by country business teams.

The digital delivery model emphasizes integrated solutions and services that leverage digital technologies to provide ongoing value to customers. The value proposition shifts from a one-time product sale to continuous performance optimization, predictive maintenance, and enhanced user experiences. The shift towards digital delivery allows Johnson Controls to offer more flexible, scalable, and customized solutions tailored to specific customer needs. This requires a change in how Johnson Controls interacts with its customers, fostering long-term partnerships and focusing on delivering measurable outcomes. Digital transformation requires a comprehensive approach that considers not only technology but also organizational culture, talent management, and customer engagement

As Customer Success Director for Digital Solutions at Johnson Controls, one is responsible for spearheading strategic initiatives for digital adoption, tangible business outcomes through our cutting-edge digital offerings while fostering long-term partnerships with customers for recurring revenues. Hence, we need to focus on developing new processes aimed at delivering outcome-driven solutions that support sustainable and healthy buildings, enhancing the energy efficiencies that are aligned with Johnson Controls' Smart Buildings strategy through the OpenBlue platform.



This initiative should be tightly aligned with our strategic imperative to scale the OpenBlue Platform while reinforcing Johnson Controls' global mission. It must define clear accountability, mobilize cross-functional stakeholder engagement, and provide actionable direction across strategic and operational layers considering organizational design, cultural context, and execution readiness. Success should be anchored in measurable outcomes that demonstrate scalable, repeatable impact.

Industry Analysis and Trend

The building automation and energy management industry is experiencing a profound transformation, shaped by a convergence of sustainability imperatives, technological innovation, and shifting customer expectations (Solnosky et al., 2020; Milenković, 2022).

Environmental concerns have become a strategic priority, driving demand for energy-efficient solutions and renewable energy integration (Parikh, 2015; Solnosky et al., 2020). The COVID-19 pandemic further accelerated the need for flexible workspaces and remote management capabilities (Petrová et al., 2022), while underscoring the urgency of digital transformation. Organizations were compelled to adopt new technologies to sustain operations and maintain stakeholder connectivity.

Emerging technologies, including IoT, AI, and cloud computing are unlocking new levels of data-driven insight and automated decision-making. This disruption has catalyzed a shift toward holistic digital strategies, with leaders aligning enterprise goals to deliver enhanced customer centricity through innovative digital solutions (Petrová et al., 2022; Raghavan et al., 2021).

For industry actors such as Johnson Controls Digital, this evolving landscape demands a strategic reinvention of offerings and business models. Success will hinge on the ability to anticipate regional sustainability trends, harness emerging technologies, and deliver scalable, customer-aligned solutions that contribute meaningfully to the global sustainability agenda.

Alignment with organization's Strategic objectives

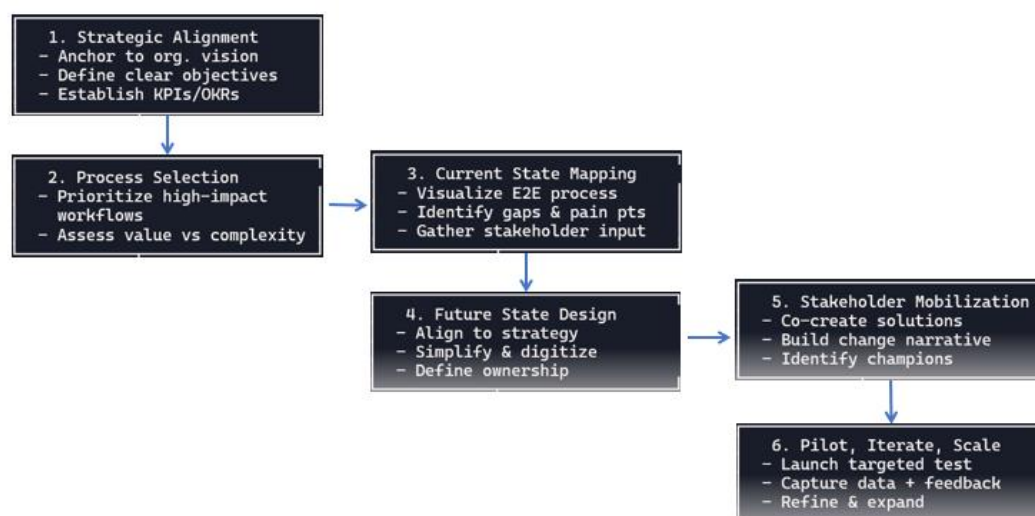
It is an alarming fact that up to 90% of strategy implementations fail to deliver intended outcomes despite the proliferation of strategic planning frameworks. This persistent gap between strategy and execution presents a critical challenge, especially for firms navigating complex, multi-market environments. This model underscores critical success factors such as leadership, corporate excellence culture, stakeholder engagement, communication, and risk management to ensure the success of JCI's Strategic Plan for outcome success

Strategic objectives of an organization serve as the guiding principles that shape the direction and the future of the organization (Alogan & Yetidots, 2006). Processes, on the other hand, represent the specific activities and workflows that organizations drive to achieve these objectives (Anttila & Jussila, 2013). Aligning these two critical elements is

essential for optimizing operational efficiency and continuously driving improvement for business growth (Murray & Trefts, 2000).

Strategic alignment is not a one-time event but rather an ongoing process that requires continuous monitoring, evaluation, and adaptation (Anderson et al., 1989). The performance of processes should be tracked against key strategic indicators, identifying emerging challenges and opportunities to adjust and align with evolving strategic priorities (Eisenhardt & Zbaracki, 1992).

The process should be designed to achieve organization strategic vision:



Digital Solution leveraging Sustainability, Environment and Customer Focus

Johnson Controls' Digital Solutions anchored by the OpenBlue platform, serve as a critical enabler of smart building technologies. This cloud-based ecosystem seamlessly integrates automation, energy management, and security systems to enhance building performance and occupant well-being. To fully realize its potential, the success of OpenBlue hinges on a robust, collaborative framework that unites a diverse array of stakeholders including building owners, facility managers, technology partners, and policymakers. Such cross-sector engagement is essential for co-creating innovative, sustainable, and energy-efficient solutions that address the region's distinct challenges in environmental stewardship, healthy buildings, and operational efficiency.



One of the key focus areas for the **reinvention** of Johnson Controls Digital is to embed sustainability and environmental stewardship as core elements of the business model centering around customers. This includes developing new products and services that contribute to a greener future, optimizing operations to reduce the organization's carbon footprint, and aligning the company's strategy with the United Nations Sustainable Development Goals.

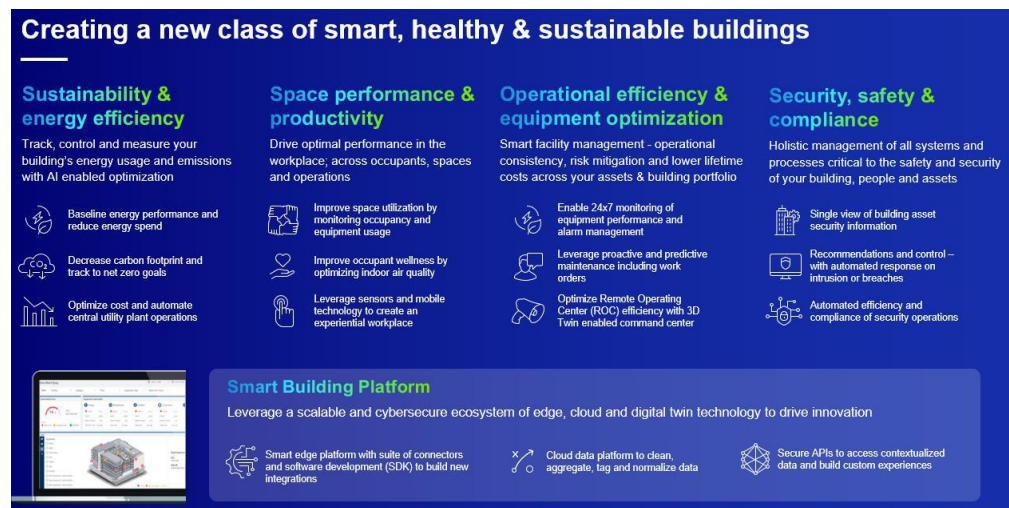
Compliance-innovation offers a promising approach to integrating sustainability and innovation, as outlined in (Doyle et al., 2018). This involves using regulatory and compliance requirements as a driver for developing new, more sustainable products and processes. Sustainability should be at the heart of the company's innovative efforts, leveraging it as a competitive advantage and a way to future-proof the business. (Liboni et al., 2016)

As discussed in Module 1, Digital transformation can be a powerful enabler of green innovation. By leveraging advanced technologies, data analytics, and intelligent systems, Johnson Controls Digital can develop new solutions that enhance energy efficiency, renewable energy integration, and sustainable building management.

Digital solutions are key to maximizing growth, particularly in the context of the **building lifecycle**. By providing integrated solutions that optimize energy efficiency, sustainability, and automation will help organizations and property owners to unlock value at each stage

of the building lifecycle. This strategic plan presents potential options for Johnson controls reaching 10x target in 3-5 years

This strategic plan outlines a potential roadmap for successfully enhancing, implementing, and expanding Johnson Controls digital solution in the next 3-5 years. It builds upon the company's existing strengths and reputation over 140 years including JCI's strong brand recognition, innovative technologies, and broad partner network.



Strategic Journey for JCI Growth opportunities

A winning strategy is built on three essential outcomes: attracting and retaining loyal customers, becoming a destination for top-tier talent, and consistently delivering sustainable, high-impact results. Together, these essentials create a resilient foundation for long-term success and market leadership.

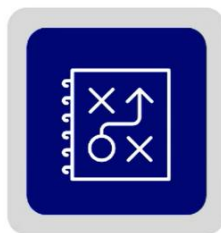


To embark on this strategic journey, JCI to develop superior capabilities and a value proposition through its 4 strategic pillars: strengthening core product and offerings, driving digitalization across the business, advancing sustainability, and verticalization with tailored solutions to address the unique needs of customer business.

This approach promises distinctive differentiation (Jerab, 2023), fostering optimism and growth for JCI, aligned with its purpose, vision, and mission, all while being guided by its values and corporate excellence culture (Module 2).

The implementation of the strategic plan proposed for JCI is expected to encounter diverse challenges in today's VUCA business environment (General et al., 2018). To effectively navigate these dynamics, JCI must adopt an innovative and collaborative approach to problem-solving and decision-making as outlined in Module 2. This approach is designed to break down internal silos, harness collective resources and capabilities, and tackle obstacles using efficient Pareto prioritization techniques (Powell et al., 2015). By streamlining issue resolution and enhancing organizational agility, this method ensures active stakeholder engagement across all levels. Ultimately, it empowers leadership to focus on forward-looking strategic thinking essential for reinforcing JCI's growth pillars, sustaining momentum, and solidifying its position as a future market leader with unmatched digital capabilities.

What is a business system?



It's how we do what we do. **It's how we win.**



It's a global and cross-functional language and methodology for **how we communicate and collaborate to win.**



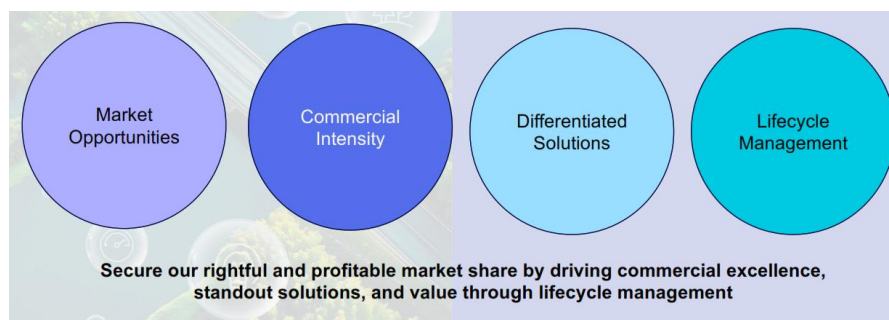
The winner is the company that is the most capable: both **capable, empowered front line people and processes.**

Despite its past successes, JCI cannot afford to become complacent in today's fast-evolving landscape. To stay ahead, the company must embrace an agile, forward-leaning strategy that continuously adapts, innovates, and responds to shifting market dynamics and technological breakthroughs. Like any enterprise, JCI operates within resource and capability constraints, making strategic prioritization essential. By focusing investments where they deliver the greatest impact, JCI can activate a powerful flywheel effect, accelerating momentum, driving disruption, and reinforcing its leadership in smart, healthy, and sustainable buildings, fully aligned with its mission.

Johnson controls continuously thrives to become the top market leader in Digital. With innovative product development, strategic acquisitions and focus on sustainability and global expansion Johnson controls has already laid a deep foundation in the early years of its digital journey



With this strong foundation, Johnson Controls should anchor its strategic initiatives to capitalize on emerging market opportunities, intensifying commercial execution, delivering differentiated solutions, and optimizing lifecycle management. Together, these four pillars will drive sustained growth and reinforce the company’s competitive edge in securing an expanding share of the global market.



To capitalize on the opportunities and align it with the strategic mission, the new process should draw insights from Johnson Control’s existing capabilities & earlier contributions.

The interplay of continuous reflection and action is the backbone of sustainable growth and success. It allows the organization to remain aware of the changing environment, stay responsive to changes, and keep improving. The journey of growth is not linear but cyclical, driven by a constant process of looking back, learning, and then moving forward with new insights.

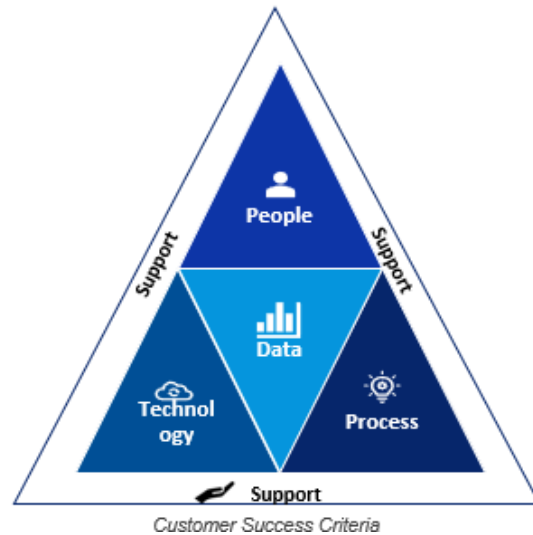


- **Customer** and their changing needs are very important pillars. Keeping a close watch for changing industry, market dynamics and customer feedback is key to success.
- Keeping the business foundation strong with **clear fundamentals** of running profitable and stable business with revenue flow. Organization should not lose its vision while thriving for expansion and vertical growth.
- **Simplification and scalability** are essential for rapid growth of an organization. Harnessing data and **optimizing performance** are critical for value growth and predictable operations.

By executing a multifaceted strategy, OpenBlue is poised to become the de facto standard for smart building solutions. Johnson Controls' commitment to localization, ecosystem partnerships, capacity building, and innovative deployment models positions OpenBlue as a transformative platform, one that meets the diverse needs and aspirations of the building industry. This strategic approach accelerates the shift toward a more intelligent, connected, and sustainable built environment.

Be Customer Centric

Customer success is pivotal in determining the longevity and profitability, necessitating a paradigm shift towards customer-centric operational models (Mendoza et al., 2006). This transformation involves the strategic integration of people, processes, and technology, with data serving as the linchpin for achieving sustained customer satisfaction and fostering enduring relationships. The alignment of data, processes, and technology is critical for operational efficiency, enabling businesses to tailor marketing plans to individual needs, match designs in a timely manner, and document long-term information requirements (Yang & Han, 2020).



It is required to move beyond transactional interactions and cultivate deeper and meaningful engagements that address the evolving needs of the customer (Sardjono et al., 2021).

The process should be designed considering the key areas for a balanced and beneficial outcome.

- **Optimise Customer Success through Data-Driven Strategies:** Data-driven strategies are essential for cultivating lasting customer relationships, improving customer experiences, increasing customer loyalty, and maximizing customer engagement (Rane, 2023).
- **Integrating Technology for Enhanced Customer Success:** The integration of technology is pivotal for translating data into tangible action driving customer success outcomes, (Odedina, 2023). By optimizing customer interactions and identifying opportunities, technology not only reduces costs but also enhances overall customer experience.
- **The Human Element in Technology-Driven Customer Success:** While technology and data provide insights, the human element remains indispensable in customer relationships. Human intuition and empathy are essential for understanding customer emotions, building trust, and resolving complex issues. Companies that invest in their employees and create a customer-centric culture are more likely to foster loyalty, advocacy, and long-term relationships

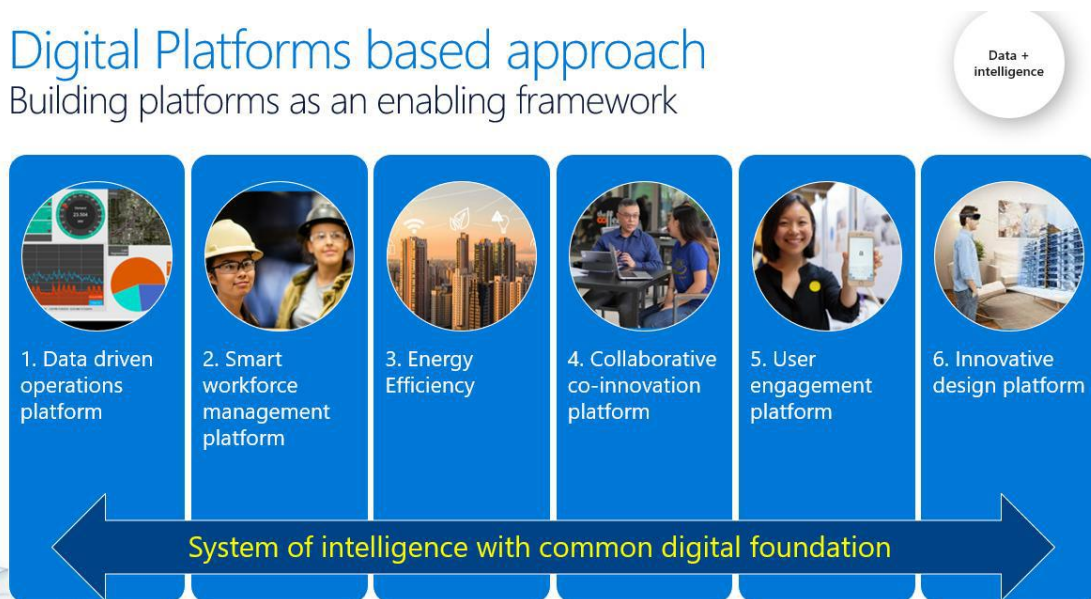
Proposed Reinvention for Johnson Controls

An Integrated Sustainable Building Platform powered by Open Blue Platform

My proposed reinvention is the creation of an Integrated Sustainable Building Platform, an evolution that harnesses the full potential of the OpenBlue ecosystem to provide a comprehensive solution for building owners and facility managers. This platform would integrate a range of advanced technologies and capabilities to drive sustainable, efficient, and resilient building operations. It represents a forward-looking approach to smart infrastructure, tailored to meet the region's diverse needs and accelerate the transition toward a low carbon, digitally enabled built environment.

Digital Platforms based approach

Building platforms as an enabling framework



“Sustainability has been at the heart of JCI business & is fundamental to everything we do”. Johnson Controls has deep commitment in addressing climate change as almost 40% of global CO₂ emissions come from buildings.



As part of its overall commitment to environmental sustainability, Johnson Controls to integrate sustainability considerations into the development and deployment of Smart Building OpenBlue Software. This should have key initiatives like:

- Enhancing the software's ability to monitor and *optimize energy consumption*, water usage, and other environmental performance metrics in buildings. (Clark, 2019)
- Incorporating *circular economy principles* into the design and delivery of the software, such as using recycled materials and enabling the reuse or repurposing of hardware components. (Taha & Elabd, 2021)
- Partnering with local governments, industry organizations, and NGOs to support the development of *sustainable building standards and certification programs*
- *Investing in renewable energy* and carbon offset projects to reduce the environmental impact of the company's operations and products in the region.

Sustainability Challenges for Smart Buildings

The integration of sustainability principles into smart buildings presents a multifaceted challenge, demanding a holistic approach that considers design, construction, operation, and decommissioning (Dutil et al., 2011). Smart buildings must prioritize the preservation of limited resources and enhance the perceived quality of life while integrating individual building systems (Apanavičienė et al., 2020).

This integration necessitates a deep dive into the complexities of energy demand, water management, material selection, and waste reduction, all of which are intricately interconnected and require careful consideration to ensure long-term sustainability (Ugah et al., 2024). Addressing the issues of user well-being and indoor environmental quality is critical to maximizing the positive social impact, while minimizing energy consumption and negating environmental effects.

Designing sustainable, healthy, energy-efficient smart buildings is complex and demands a holistic and collaborative approach. The customer success process within the realm of smart buildings is intricately linked to ensuring that the implemented technologies and sustainable practices effectively meet the needs and expectations of building occupants, owners, and other stakeholders. This entails a comprehensive approach encompassing various stages

- Understanding the unique requirements and preferences of customers is paramount. This may involve strategies to improve occupant well-being, reduce energy consumption, and enhance operational efficiency.
- Effective communication and collaboration are essential throughout the customer success journey. This includes providing clear and transparent information about the benefits, features, and limitations of smart building technologies, as well as actively engaging customers in the decision-making process.

- Thirdly, proactive monitoring and maintenance are critical for ensuring the long-term success of smart buildings. This involves leveraging data analytics and remote monitoring tools to identify and address potential issues before they escalate, as well as providing timely support and training to building occupants and operators (Mazzara et al., 2019). The integration of Building Information Modeling, Artificial Intelligence, and the Internet of Things can help address the challenges within the construction sector (Dagou et al., 2025).

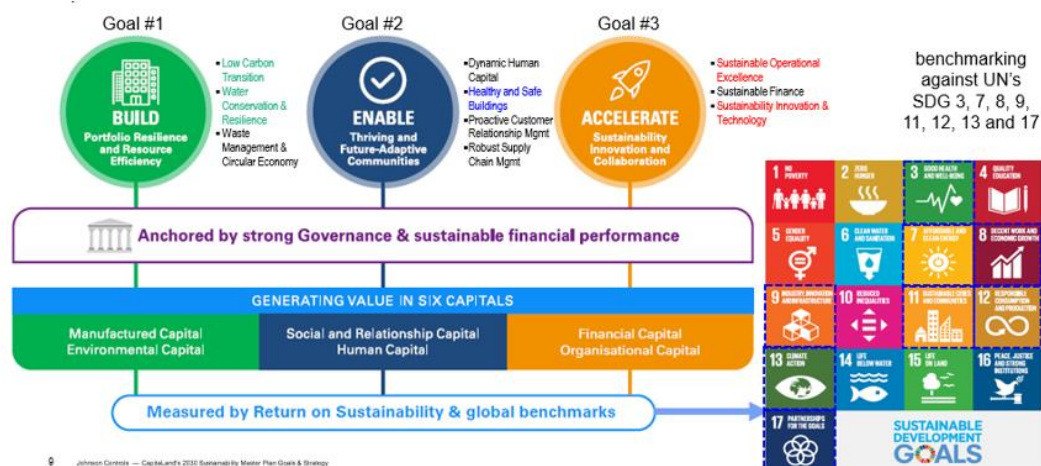
By aligning Johnson Controls smart building technology with sustainability goals, the organization will not only contribute to the overall environmental performance of buildings but also position itself as a leader in the growing market for green and energy-efficient building solutions.

OpenBlue platform plays a crucial role in supporting 2030 Sustainability Master Plan, which focuses on portfolio resilience, resource efficiency, and sustainability innovation. OBEM contributes by:

- **Optimizing Energy Use:** Leveraging AI-driven analytics to reduce energy consumption across the properties connected through the platform.
- **Enhancing Operational Efficiency:** Providing predictive maintenance and automation to streamline building operations.
- **Supporting Carbon Reduction Goals:** Helping to achieve its emissions targets through intelligent energy management and innovation.
- **Driving Sustainability Innovation:** Integrating smart building technologies to align with long-term environmental commitments.

2030 Sustainability Master Plan Goals

Commit to stay nimble and review our sustainability goals and strategy every two years in line with shifts in the global landscape.



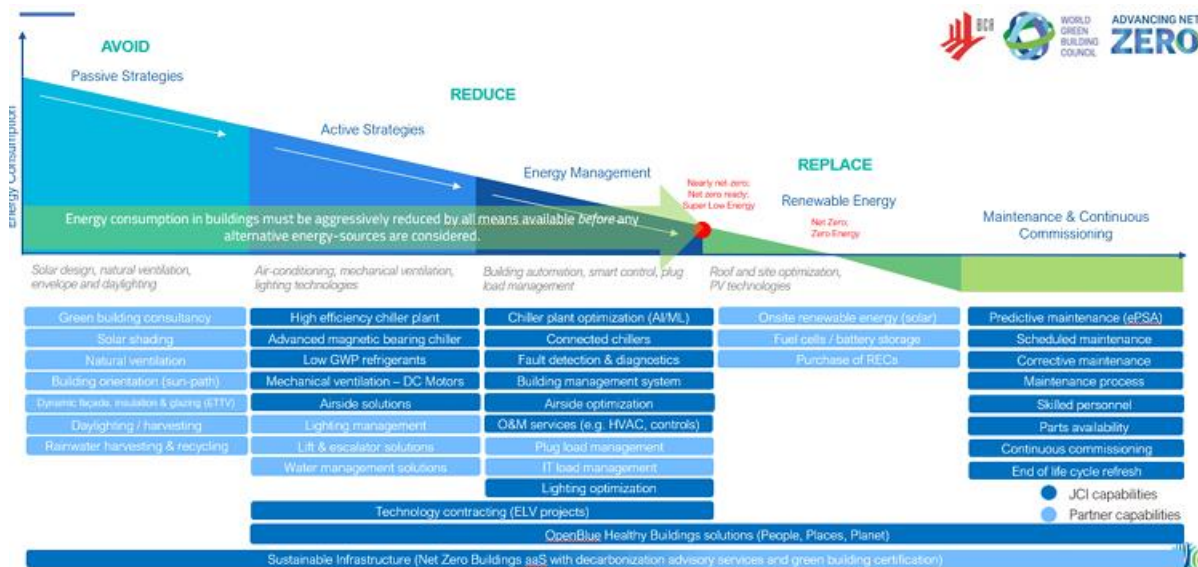
With evolving business demands and rapid customer requirements a continuous product enhancement is critical to remain competitive for achieving business goals of the organization. Moreover, the integration of user behavior data with building management systems represents a critical area for improvement, allowing for a more holistic approach to energy management (Li, 2024).

1. Energy Efficiency for cost optimization

Enhancing the energy efficiency of buildings is a vital part of Johnson Controls' sustainability strategy and a major catalyst for expanding its Digital Solutions business in Asia. The company aims to utilize its Open Blue Platform to assist customers in achieving substantial reductions in energy use and greenhouse gas emissions, while also decreasing operating costs and enhancing the overall performance of their buildings.

To achieve these energy efficiency goals, the integrated platform must encompass technological innovation, strategic partnerships, and a commitment to fostering a culture of sustainability (Papadakis & Katsaprakakis, 2023).

- Identify and implement the most effective energy-saving technologies and strategies, such as high-performance building envelopes, efficient HVAC systems, and advanced building automation and control systems.
- Optimize the integration of renewable energy sources, energy storage, and microgrid technologies to reduce reliance on fossil fuels and improve grid resilience.
- Utilize data analytics, machine learning, and AI-powered systems to continuously monitor and optimize building energy performance, identifying opportunities for further improvements.
- Foster partnerships with key stakeholders, including building owners, developers, policymakers, and technology providers, to drive large-scale adoption of energy-efficient building solutions across the region.
- Ensure that energy efficiency initiatives are closely aligned with the overall strategic objectives of Johnson Controls and its customers, balancing environmental, economic, and social considerations.



2. Healthy Buildings for occupant well-being

In addition to sustainability, Johnson Controls Digital Solutions should focus on creating healthy built environments that support the well-being of building occupants. The importance of healthy buildings and indoor air quality (IAQ) has significantly increased after COVID-19.

People spend approximately 90% of their time indoors, highlighting the critical impact of the indoor environment on human health and productivity (Tran et al., 2020). Johnson Controls' Healthy Building initiative should enhance the well-being of building occupants by optimizing indoor environmental quality and creating spaces that cater to the multifaceted needs of individuals (Altomonte et al., 2020).

- Enhanced ventilation strategies, such as demand-controlled ventilation to optimize fresh air intake based on occupancy levels and real-time air quality conditions to ensure the indoor spaces are adequately ventilated while minimizing energy consumption (Persily & Emmerich, 2012)
- Sophisticated filtration systems are used to remove particulate matter, allergens, and other airborne contaminants, contributing to improved indoor air quality and reduced respiratory health risks
- The program should integrate advanced technologies, data analytics, and sustainable practices to transform buildings into environments that promote physical, mental, and emotional well-being (Dai et al., 2025).
- Smart building technologies that allow occupants to personalize their thermal comfort, lighting, and acoustic settings, thereby promoting individual well-being and satisfaction.

- Real-time monitoring systems to continuously assess air quality parameters, allowing building managers and occupants to make informed decisions and interventions to improve the indoor environment (Marques & Pitarma, 2019).
- By incorporating a holistic perspective, healthy buildings should address the complex interplay of factors that influence occupant comfort, satisfaction, and overall health, with the goal of fostering healthier and more productive indoor spaces (Wierzbicka et al., 2018).

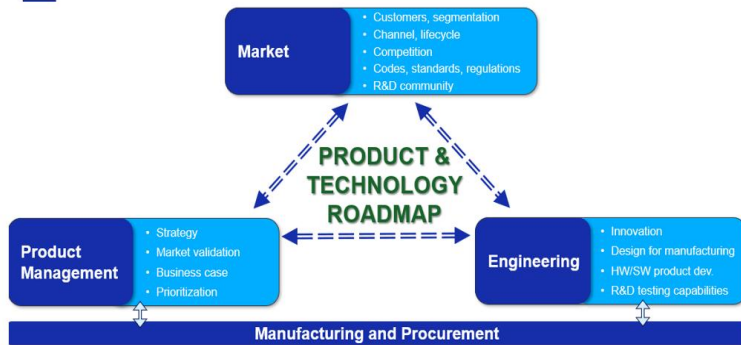
Building on the foundation established in the previous sections, the proposed Integrated Platform for Johnson Controls' Digital Solutions business will be structured to address the unique challenges and strategic priorities of the organization. This will prioritize the creation of healthy, comfortable, and productive indoor environments that enhance the overall well-being of building occupants. By leveraging the latest smart building technologies and design principles, the process will aim to improve air quality, promote physical activity, and foster a sense of community for a sustainable built environment. (Assali, 2016; Karimi et al., 2023).



3. Differentiated product positioning

Johnson Controls has a diverse product portfolio, primarily focusing on building technologies. The smart building technologies are rapidly growing, driven by increasing urbanization, concerns over energy efficiency and sustainability, and the need for building automation to support country's economic development. (Celebi, 2008) To capitalize on this opportunity, Johnson Controls should adopt a multi-phased approach and expand its Smart Building OpenBlue Software offerings to increase market share

Development cycle driven by collaboration and synthesis across market, engineering and product management



Differentiated Products Position Us to Win

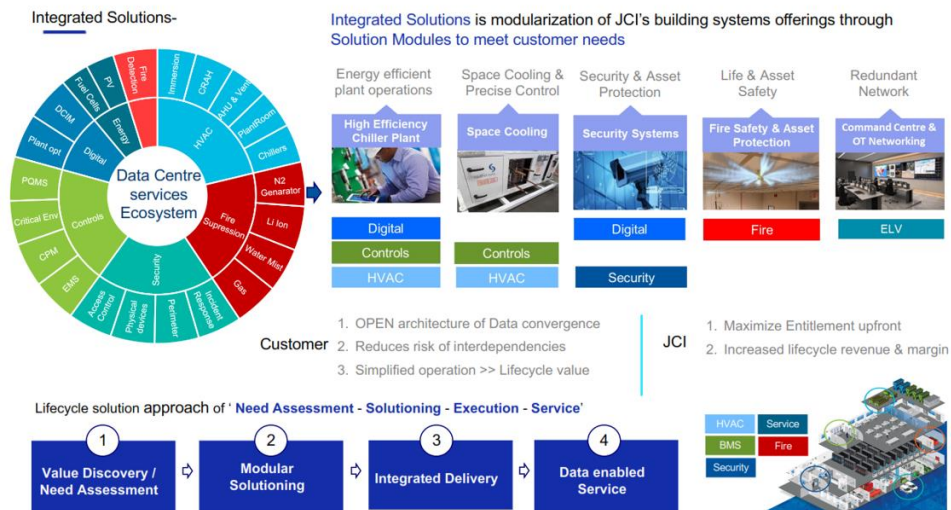
Secular trends introduce new customer needs, driving demand for new products:

- **Sustainability:** Heat pumps, refrigerants, carbon footprint, etc.
- **Digital:** Connectivity and software as a service
- **Data Centers:** Global demand is growing fast with AI demand and power intensity increases

Technology is rapidly evolving, and products become more **complex**, requiring more **support** through the lifetime of the system.

Winning product portfolios strengthen our position in a dynamic market and are critical to unlock downstream lifecycle opportunities.

Johnson controls, with its vast industry experience and deep domain knowledge, should focus more on delivering integrated, value-driven solutions rather than just individual products. Instead of selling products with fixed prices, Johnson Controls implements outcome-based contracts for the guaranteed results for energy savings and sustainability targets. It will need a new strategy for creating customer success and long-term relationships.



Key issues that Johnson Controls' Digital Solutions address:

- Sustainability Innovation & Technology: OBEM across the portfolio – AI driven plant optimization
- Healthy & Safe building (Delighted Occupants) - IAEQ-Smart Toilet
- Sustainable Operational Excellence (Efficient FM Operations) - Data driven predictive regime –FDDs
- Enhanced building Asset – Performance optimization with Asset age analytics
- Productive workforce – KPI definition/benchmarking and measurement around maintenance response

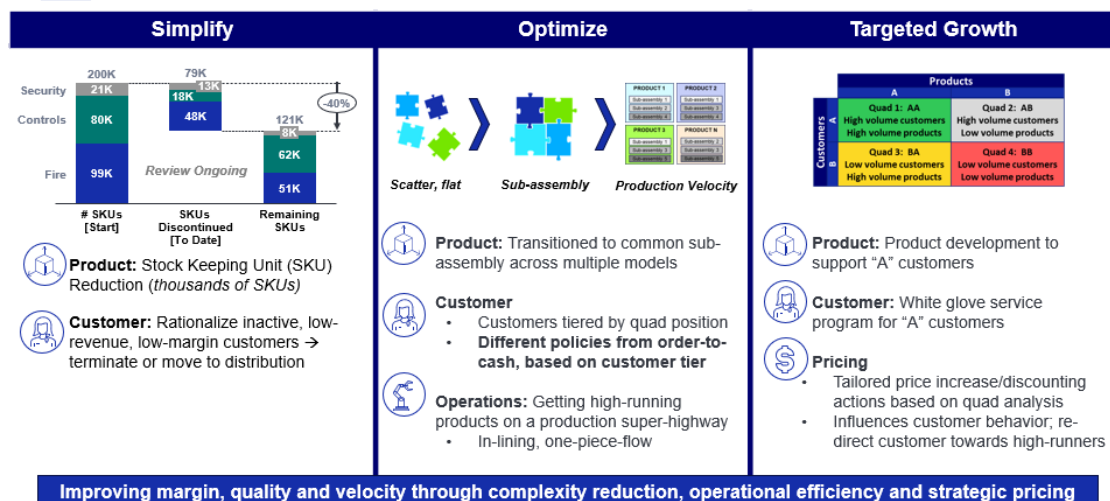
4. Service Enhancement with Customer Centric Approach

Johnson Controls' extensive portfolio of building technologies like energy management and sustainability help to drive the customer-centric service approach that involves both product-related services (e.g., installation, maintenance) and value-added offerings enhancing customer experience and retention. To differentiate JCI from competing smart building solutions and to strengthen customer loyalty, we have an opportunity to improve the service offerings with customer focus approaches.

- Expanding the range of service offerings includes predictive maintenance, remote monitoring, and data-driven optimization to provide a more comprehensive solution for building owners and facility managers.
- Proactive Customer Support and Ongoing Engagement for 24/7 Monitoring and Remote Diagnostics. Preventative maintenance services based on remote monitoring to ensure customers' systems are always performing optimally, reducing emergency service calls, lowering operational costs.
- Improving user experience through regular updates, feature enhancements, and intuitive interface design. This will involve incorporating customer feedback, industry's best practices, and the latest user experience design principles.
- Developing a robust training and certification program for building operators and technicians to ensure effective deployment and utilization of the OpenBlue software.

These initiatives will be underpinned by a deep understanding of customer needs, pain points, and expectations, as well as a continued focus on service excellence and innovation.

Reducing complexity and improving cost and velocity through 80/20



5. Customer Retention – Cornerstone of SaaS Business Sustainability

Even after developing a great product and identifying the target market, it is crucial to invest in retaining the existing customers as to selling to new customers.

- **Why is customer retention important?**

Customer retention measures not only how successful a company is at acquiring new customers but also how successful they are at satisfying existing customers. The ability to retain existing customers is a key objective of relationship marketing (Ahmad & Buttle, 2002). Retaining customers typically proves more cost-effective than acquiring new ones, making it a cornerstone of superior relationship economics (Ahmad & Buttle, 2002). A more holistic perspective on customer retention extends beyond the simple binary of retain/not retain (Ascarza et al., 2017). A more holistic perspective on customer retention extends beyond the simple binary of retain/not retain (Ascarza et al., 2017). It also increases ROI, boosts loyalty, and brings in new customers through the existing customer business.

- **Customer retention is a strategy**

Customer retention is more than just a strategy; it serves as a foundational framework that directs business goals and assesses their outcomes (Pereira et al., 2025). Focusing on customer retention translates into enhanced profitability through multiple avenues. Retaining existing customers often yields a higher return on investment compared to acquiring new ones (Suh, 2023). Long-term customer relationships are fostered through relationship marketing that has a significant impact on customer satisfaction, trust, commitment, and communication (Rosário & Casaca, 2023). Loyal customers tend to spend more over time, are more receptive to new offerings, and often act as brand advocates through positive word-of-mouth referrals (Pereira et al., 2025). Increasing customer retention rates by even a small percentage can substantially increase a company's net present value (Ahn, 2020).

- **Affordability:** It is 6 to 7 times more expensive to acquire a new customer than it is to retain an existing customer.
- **ROI:** 5% increase in customer retention can increase company revenue by 25-95%.
- **Loyalty:** Retained customers buy more often and spend more than newer customers. They have learned the value of a product or service and the strong organization values to keep coming back again.
- **Referrals:** Satisfied, loyal customers are more likely to sing a company's praise and refer to their friends and family bringing in new customers, free of charge.

- **Business stability:** Reduced customer churn leads to predictable revenue streams, enabling better forecasting and resource allocation. In competitive industries, a strong base of loyal customers provides a buffer against market fluctuations and competitive pressures
- **Brand reputation:** Retaining customers enhances a company's reputation and brand image (Han et al., 2009). This can have a significant impact on profitability and growth (Roberts-Lombard, 2009).
- **Customer Satisfaction:** High customer retention rate can be a strong indicator of customer satisfaction, which in turn enhances the overall brand equity.

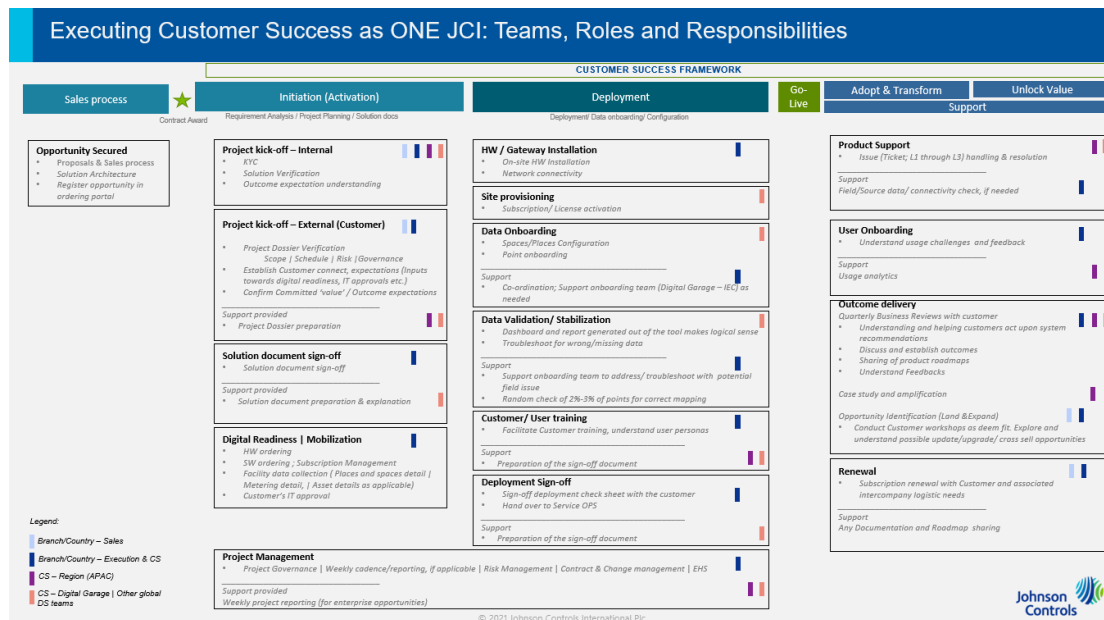
- **How to achieve customer retention**

Customer retention is critical for achieving sustained growth and profitability, requiring a strategic focus and comprehensive approach. By prioritizing customer satisfaction, building strong relationships, and effectively addressing customer needs, businesses can cultivate lasting loyalty and drive long-term success. To effectively manage customer relationships and ensure retention, companies must adopt customer-centric approaches. Providing exceptional and personalised customer service that exceeds expectations encourages customers to remain loyal (Bariha, 2021).

6. Local Empowerment for collaborative delivery for improving customer experience

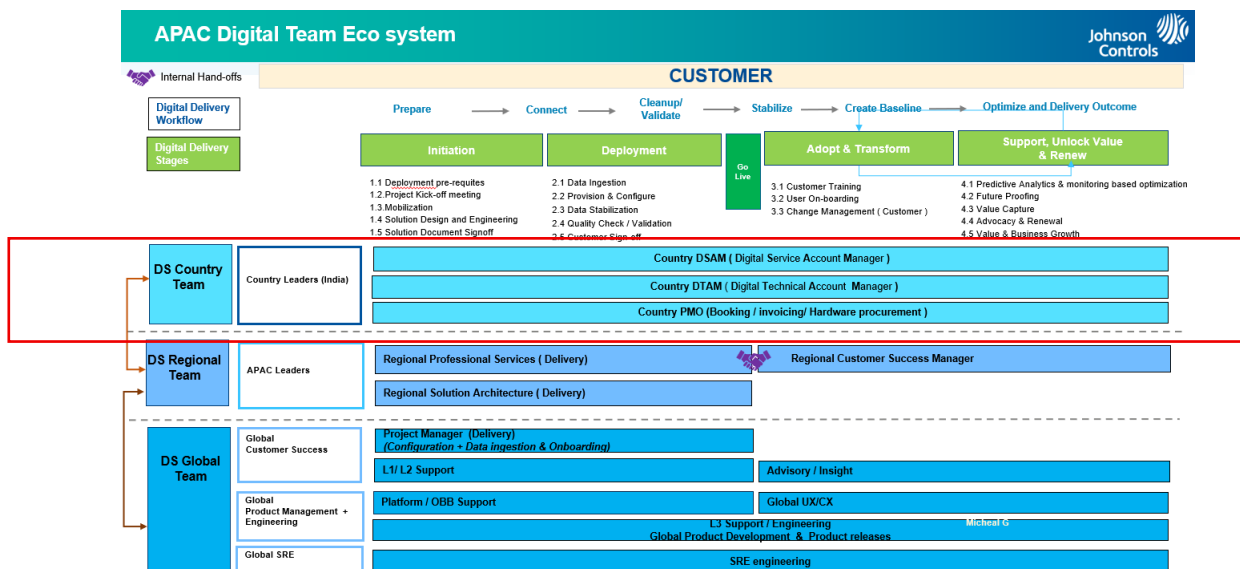
Digital solutions being a remote business managed by global team, it is important to enhance local team relationships for in-person engagement and business growth. Collaborative delivery models foster synergistic relationships between global teams, local teams, and customers. Leveraging local expertise and resources to deliver customized solutions and services resonate with the specific needs and preferences of customers (Macchion et al., 2016).

- 'One-size-fits-all' approach is often ineffective in managing customer relationship. Understanding local market dynamics, people culture and local nuances are essential for building strong customer relationships and achieving sustainable business growth (Macchion et al., 2016).
- Collaborative delivery, in the context of customer relationship management, refers to a strategic approach where organizations partner with local working teams to enhance customer interactions and service delivery (Ezilarasi & Kavitha, 2022).
- This model emphasizes shared responsibility and mutual benefit, with both the global organization and its local branch contributing their unique strengths and expertise to create a seamless and personalized customer experience.



The process plan should include some of the key principles for execution success:

- Local country engagement** is a cornerstone of successful collaborative delivery. Local collaboration is essential for fostering trust through tangible support and building rapport with customers, as it demonstrates a genuine understanding of their values and preferences. This collaboration enables JCI to tailor its customer relationship strategies to the specific needs of the local market, understanding the country standards and sustainability goals, presenting the products and services relevant and appealing to local customers.



- Well-defined **roles and responsibilities** within local teams cultivates a robust customer relationship ensuring customer success in contemporary business environments (Sayogo et al., 2016). This clarity fosters a sense of ownership and accountability, motivating individuals to take proactive measures in addressing customer needs and resolving issues promptly. In contrary, the absence of clear roles can lead to confusion, duplicated efforts, and missed opportunities, all of which can negatively impact the customer experience and hinder the achievement of customer success objectives. The effective management of customer relationships encompasses not only building connections between companies and customers but also fostering intimate and profitable customer relationships (Sardjono et al., 2021).

Key Roles and Responsibilities - Branch

Role : DSAM (Digital Service Account Manager) – Branch

Responsibilities

1. Responsible for end-to-end project success leading to life c
2. Manage customer relationship throughout the project lifec
3. Support site survey and data gathering for deployment pre
4. Co-ordinate with 3rd party vendors for site assessment and
5. Facilitate digital readiness of the facility/ site for deployme
6. Customer IT approvals & network access for data onboardin
7. Hardware procurement (like OBB, IAQ etc) and complete in
8. Troubleshoot and fix data and site related issues
9. Support global onboarding teams (IEC) for Data ingestion a
10. Manage project delivery schedule and budget
11. Obtain customer sign-off and subscription start on delivery
12. Issuance of inter-co PO and completing it in DOP (Digital O
13. Maintain **data quality and integrity of the platform** throug
14. Support customer on change management process and pla
15. **Drive Outcomes/ Rol** from the deployed platform and com
16. Run Delivery progress meeting during delivery phase and C

Key Roles and Responsibilities - Branch

Role : DTAM (Digital Technical Account Manager) - Branch

Responsibilities

1. Technical advisor for customer leading to digital business growth.
2. Influence product roadmap for customer digital growth strategy and budget
3. Ensure data health of the solution ; identify and fix the cause of issues / data loss.
4. Drive user onboarding with additional training / support, when required.
5. Continuous assessment for higher ROI , increased energy savings and higher platform adoption
6. Develop simple custom report, widgets, analysis for customer business requirement
7. Fine tune FDD* diagnosis and cost expression when required .
8. Technical support for **QBR / MOR** and strategy discussion with customer
9. Develop and execute **Value delivery** for continual success
10. Provide ongoing configuration* due to changes in site (Un-mapping old points and re-onboarding existing points)
11. Support customer on change management process and platform adoption plans

* Notes of clarification:

- Ongoing configuration** – DTAM services are limited to minor adds/moves/changes; New buildings or large configuration that impacts subscription price would be handed over to Sales team for expansion opportunity.
- Complex FDD with additional configurations to be evaluated for cost impact / Variation Order
- Complex reports to be evaluated for cost impact / Variation Order

- The strategic implementation of methodologies like RASCI offers a structured framework for delineating roles and responsibilities, ensuring that each team member comprehends their specific contribution to the overall customer relationship management process (Redjeki, 2021). By mapping out these roles for each task or decision within a customer relationship management process, the RASCI matrix provides a comprehensive overview of who is responsible for what, thereby eliminating ambiguity and promoting accountability (Jacka & Keller, 2012). Implementing a RASCI matrix can significantly enhance the efficiency and effectiveness of local teams by fostering a shared understanding of roles and responsibilities.

The collaborative delivery that is effective in customer management also enables to shorten sales cycles, lower sales costs, and identify new markets and channels for growth (Wang et al., 2022). Ultimately, the efficiency of customer service processes and the successful implementation of CRM solutions are significantly improved through successful local collaboration

Disruptive Strategies for Reinventing Johnson Controls Digital Solutions

To successfully implement the Integrated Sustainable Building Platform with renewed customer focus, I propose the following disruptive strategies:

- *Organizational Restructuring*: Transition from a traditional product-centric business model to a more agile, customer-centric structure that prioritizes the delivery of integrated, sustainable building solutions.
- *Talent Acquisition and Upskilling*: Invest in attracting and developing a workforce with expertise in emerging technologies, data analytics, and sustainability-focused design and implementation.
- *Ecosystem Partnerships*: Forge strategic alliances with technology providers, renewable energy companies, and sustainability consultants to create a robust ecosystem that can deliver comprehensive solutions to our customers.
- *Shift to a Platform-based Business Model*: Leverage the Open Blue platform to create a scalable, cloud-based solution that can be rapidly deployed and customized to meet the diverse needs of customers across the region.
- *Sustainability-Driven Marketing and Branding*: Position Johnson Controls Digital as a champion of sustainable building practices, leveraging the Integrated Sustainable Building Platform to demonstrate our commitment to environmental stewardship and our customers' net-zero goals.
- *Embracing a Growth Mindset*: Foster a culture that encourages innovation, rapid prototyping, and the ability to adapt to changing market dynamics and customer preferences.
- *Proactive Stakeholder Management*: Anticipate and address potential resistance to change from within the organization, as well as potential concerns from regulators, industry associations, and the broader community.
- *Continuous Improvement and Optimization*: Establish robust feedback loops and data-driven decision-making processes to constantly refine and enhance the Integrated Sustainable Building Platform, ensuring that it remains at the forefront of industry trends and customer needs.

By implementing these disruptive strategies, Johnson Controls Digital in Asia will be positioned to reinvent itself as a leader in the sustainable building solutions market, driving innovation, enhancing customer value, and contributing to the region's net-zero goals.

1. Talent Development and Organizational Transformation

A strong talent strategy combined with effective organizational transformation is essential for executing a strategic plan and driving successful business growth in Johnson Controls.

Strategic Drivers	Leading Self	Leading Teams	Leading Managers	Leading the Enterprise
Build a Performance Culture		Building an Effective Team	Building Effective Leaders	Building Effective Leaders
		Delegating Responsibility	Empowering the Organization	Empowering the Organization
	Coaching Others	Coaching Others	Coaching and Developing Talent	Coaching and Developing Talent
				Energizing the Organization
	Customer Orientation	Customer Orientation	Customer Focus	Customer Focus
Drive Operational Improvements	Bottom Up Innovation	Bottom Up Innovation	Inspiring Bottom Up Innovation	Inspiring Bottom Up Innovation
	Digital Acumen	Digital Acumen	Digital Leadership	Digital Leadership
	Execution Discipline	Execution Discipline	Driving Execution and Results	Driving Execution and Results
	Influencing with Impact	Influencing with Impact	Driving Buy-In	Driving Buy-In
	Adaptability	Facilitating Change	Leading Change	Leading Change
Create Growth Platforms				Entrepreneurship
			Financial Savvy	Financial Savvy
		Business Acumen	Business Acumen	Business Savvy
	Decision Making	Decision Making	Operational Decision Making	Operational Decision Making
		Global Acumen	Global Acumen	Global Savvy
	Managing Work	Planning and Organizing	Establishing Strategic Clarity	Establishing Strategic Clarity
	Collaboration	Building Partnerships	Cultivating Networks and Partnerships	Cultivating Networks and Partnerships

Leadership development is critical for organization's transformation and success. It should be integrated with the company's diversity and inclusion efforts, not only attracting diverse talent but also nurturing for leadership positions. Leaders drive effective change management with growth mindset for quickly adapting and progressing strategic plans.

- Investing in upskilling and reskilling programs to equip the workforce with competencies in cutting-edge technologies like AI, machine learning, data analytics and more.
- Investing in internship programs to attract young talent and help them build necessary skills for future roles in the company.
- Fostering a culture of collaboration, agility, and continuous learning within the organization to enable rapid adaptation to market changes and customer needs.
- Strengthening the company's capabilities in areas such as digital marketing, data-driven decision-making, and strategic partnership management to support the successful execution of the expansion plan.
- Establishing a robust performance management system to align employee goals and incentives with the strategic objectives of the business, ensuring accountability and driving sustained growth.

These organizational talent-focused initiatives should enable Johnson Controls to build a strong, resilient, and customer-centric team capable of delivering exceptional value to its clients.

2. Organizational Restructuring

The success of the proposed collaborative problem-solving and decision-making process will depend heavily on the organizational structure and culture of Johnson Controls' Digital Solutions business. To ensure its effective implementation, a robust governance framework will be established. Dedicated business unit to oversee specific market requirements for developing and deploying smart building solutions. It will be led by experienced leaders for cross functional activities leveraging the strength and expertise of overall organization.

The governance framework will provide clear guidance and accountability for the collaborative problem-solving and decision-making process, ensuring that it is implemented effectively and in alignment with the organization's strategic priorities. This framework will define the roles and responsibilities of key stakeholders, establish decision-making protocols, and put in place monitoring and evaluation mechanisms to track the process's impact and drive continuous improvement.

3. Stakeholder Management

The successful implementation of the collaborative problem-solving and decision-making process will require the active engagement and alignment of a diverse set of stakeholders. These stakeholders include Internal stakeholders (like employees within the Digital Solutions business unit) Customers (like Building owners, developers, facility managers, and other end-users who will directly benefit from the implementation of the Digital Solutions platform) Technology partners (like Vendors, suppliers, and collaborators who provide the software, hardware, and integration services that make up the Open Blue Platform).

And the Regulatory and policy stakeholders (like Government agencies and industry associations) and Community and environmental stakeholders (like Local communities, non-governmental organizations, and advocacy groups that have a vested interest in the environmental and social impacts of Johnson Controls' operations). (Yang et al., 2014)

By clearly identifying and understanding the needs, priorities, and potential concerns of these key stakeholders, the collaborative problem-solving and decision-making process can be designed to address their diverse interests and promote a shared vision for the future of sustainable, healthy, and energy-efficient buildings. (Rhodes et al., 2014)

4. Change Management

Change management is essential for successful implementation of the collaborative problem-solving and decision-making process. It helps organizations effectively transition when implementing new processes or making improvements. It ensures that employees understand, accept, and adopt changes smoothly, minimizing resistance and disruptions.

Conducting a comprehensive stakeholder analysis will help identify all individuals and groups that will be affected by the implementation of the new process. (Nursin et al., 2018) Develop a stakeholder engagement plan to ensure that all stakeholders are informed, consulted, and involved in the change process (Clardy, 2013) (Nursin et al., 2018). By addressing change management concerns will increase the likelihood of a successful implementation of the collaborative problem-solving and decision-making process, driving the sustained adoption of the Open Blue Platform and the achievement of the organization's strategic objectives.

5. Leadership and core values

An effective leadership style that fosters a positive culture of diversity and inclusion will drive innovation, employee satisfaction, and long-term success. The combined impact is not only reflected in the workplace environment but also in the organization's performance and reputation in the broader market.



6. Innovation culture and R&D

Fostering a culture of innovation will strengthen collaborative problem-solving and decision-making, ensuring the organization remains agile, adaptable, and responsive to the evolving needs of the market and its customers. Johnson Controls mission and vision statements should clearly articulate the commitment to innovation, sustainability, and customer-centricity to align all employees around a common purpose and future direction.

Foster a culture of trust and autonomy, allowing employees the freedom to explore new ideas and implement innovative solutions. Implement a robust system of rewards and recognition that celebrates and incentivizes innovative thinking and successful problem-solving. Allocate a significant portion of its R&D budget for enhancing the capabilities of its Smart Building solutions and integrated offerings incorporating feedback from customers

- **Talent Acquisition and Development:**

Invest in recruiting and training skilled workforce that includes hiring technical experts, sales and marketing professionals and customer service personnel with deep knowledge of the local markets and customer needs.

- **Partnerships and Collaborations:**

Establish strategic partnerships with local building management firms, real estate developers and technology providers to expand its distribution channels and enhance integrated solutions. Identify and work with select strategic customers for co-creating product roadmap and pilot projects deployments. These efforts will help to gather valuable feedback to refine products and build a successful track record that can be used to drive wider adoption in the market.

- **Feedback and improvement cycle:**

It is a cornerstone of iterative development, enabling teams to continuously improve products and processes through structured, timely input. The Agile feedback cycle is recurring loops of communication and evaluation that occur throughout the development process. These loops ensure that teams stay aligned with stakeholder needs, adapt quickly to changes, and deliver high-value outcomes. Agile thrives on **short feedback loops** to prevent misalignment with user needs, enable rapid course correction, foster a learning mindset, reduce rework and technical debt

It is crucial to underline the breakthrough results during the new process formulation. It is essential for JCI to clearly articulate the strategy behind the process, establishing progress metrics and effectively managing its execution for achieving breakthrough results.

An important part of adopting and executing a new process is monitoring and measuring. Balanced Scorecard (BSC) (Weller, 2017) is a well-known methodology for gauging and tracking such processes with key goals. It is important for goals and targets are managed top down as employees inherit their leadership goals and target in their performance score cards.

- **Monitoring and Measuring:**

The score card capturing KPI (Key Performance Indicators) should be diligently and continuously tracked in small team meetings and in leadership discussions. The results roll up to top management measures for review ensuring every employee in the organization has a critical part in this strategy for achieving the result.

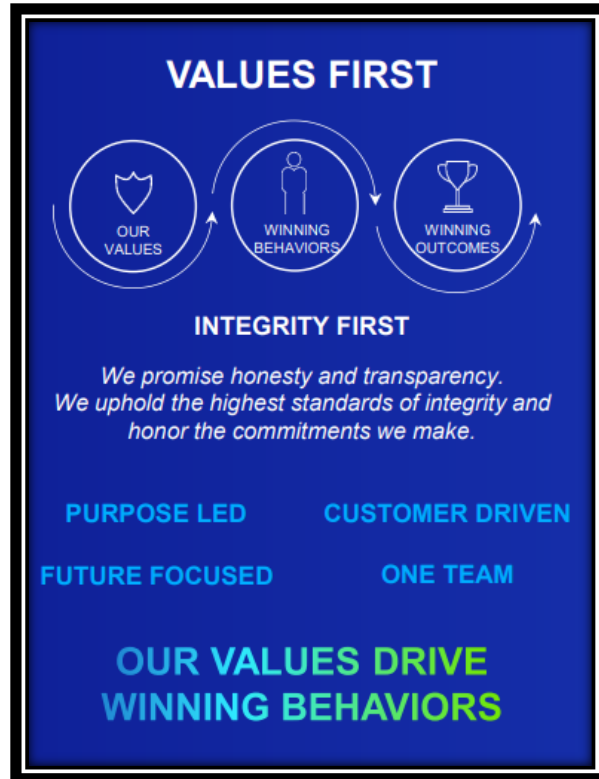
It is also important to acknowledge the new process proposals are untested for guaranteed outcome. 70-90 % of organizations have experienced failures due to many reasons including top management change, organization's direction shift, financial crunch, market demands etc. (Kaplan et al., 2004). This underscores the need to understand the potential risks of execution failures and to implement corresponding monitoring and evaluation plan for mitigation measures.

Conclusion

The proposed Integrated Sustainable Building Platform, anchored in customer-centric services, marks a strategic reinvention of Johnson Controls Digital's business model. By harnessing our deep domain expertise and integrating advanced technologies, we are enabling customers to accelerate their sustainability ambitions, elevate operational performance, and build resilience against future disruptions.

Through strategic partnerships, a culture of innovation, and an unwavering commitment to sustainability, we are not only empowering our customers, but we are actively contributing to global climate goals and reinforcing Johnson Controls Digital's position as a trailblazer in the smart buildings sector.

By cultivating a collaborative ecosystem of partners, innovators, and industry leaders, we are creating the conditions for continuous advancement and purposeful disruption across the built environment, while upholding our 'Integrity First' value proposition. Our capabilities in data analytics, predictive maintenance, and intelligent control systems will be instrumental in optimizing building performance, reducing energy consumption, and minimizing environmental impact.



High Performance with Unyielding Integrity – We are in this together!

This holistic approach to smart building management ensures our customers can confidently pursue net-zero targets while enhancing user experience and operational agility. The success of this initiative will hinge on our ability to execute the organizational shifts and strategic investments necessary to scale and sustain the platform.

Ultimately, our vision for Johnson Controls Digital solution is to redefine the future of sustainable built environments, empowering our customers to shape a greener, more resilient, and digitally enabled world.

Total number of words: 6948

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Alignment with Module 1 and 2 Insights

This proposed reinvention synthesizes the strategic frameworks and collaborative methodologies developed in Modules 1 and 2. The foundational analysis of industry trajectories, stakeholder expectations, and Johnson Controls' core capabilities directly informed the conceptualization of the Integrated Sustainable Building Platform. This platform responds to the escalating demand for built environments that are not only energy-efficient and resilient but also digitally integrated to support adaptive, human-centric operations.

Moreover, the problem-solving and decision-making models explored in Module 2 have been embedded into the platform's architecture, ensuring responsiveness to dynamic user needs and scalability across diverse geographies. By bridging strategic foresight with operational design, this capstone presents a holistic solution that aligns with Johnson Controls Digital's sustainability objectives and positions the organization to lead in the transformation of smart building ecosystems.

Summary of Module 1 - Develop New Ideas and Processes for JCI Digital in Asia

Outcomes: Strategic Foundations for Sustainable Building Innovation

Module 1 established the conceptual and strategic groundwork for the development of the Integrated Sustainable Building Platform, anchored by a newly developed Sustainable Building Design Framework. This framework synthesizes best practices for embedding sustainability across the lifecycle of smart buildings—from design and construction to operations and renewal. It serves as a foundational reference for aligning environmental imperatives with digital innovation.

The framework incorporates a spectrum of sustainable design principles, including the prioritization of eco-friendly and locally sourced materials, optimization of building orientation and systems to enhance energy efficiency, and the integration of smart waste management and recycling technologies to support the transition toward a circular economy. These principles are contextualized within broader industry shifts and organizational capabilities, resulting in a platform that is both technically robust and strategically aligned.

Key outcomes from Module 1 include:

Industry Trend Analysis: A comprehensive review of macro drivers, including the rise of smart cities, increasing sustainability mandates, and the proliferation of IoT technologies provided critical insight into evolving market dynamics and stakeholder expectations. These findings informed the strategic direction and value proposition of the platform.

Competitive Positioning Assessment: A detailed evaluation of Johnson Controls Digital's market stance revealed opportunities for differentiation through integrated energy and automation solutions. This analysis identified strategic levers for expansion and highlighted areas where existing competencies could be amplified.

Innovation Pipeline Development: Structured ideation sessions generated a portfolio of new product and service concepts, with the Integrated Sustainable Building Platform emerging as a flagship initiative. This concept leverages Johnson Controls' expertise in building automation and sustainability to deliver measurable impact across diverse geographies. These innovative ideas formed the foundation for the company's reinvention strategy.

Strategic Prioritization Framework: Development of a strategic framework to evaluate and prioritize the most promising ideas, considering factors such as market potential, alignment with corporate objectives, and technical feasibility. This structured approach ensured that the company's resources were towards the most impactful and viable initiatives.

Organizational Transformation Recommendations: To support sustained innovation, the module proposed cultural and structural shifts within JCI Digital including the formation of dedicated innovation teams and the adoption of design thinking methodologies. These transformative changes are essential for fostering agility and resilience in a rapidly evolving built environment sector.

Summary of Module 2 - Problem Solving and Decision Making for JCI Digital

Outcomes: Strategic Implementation through Collaborative Decision-Making

The collaborative problem-solving and decision-making frameworks developed in Module 2 have played a pivotal role in shaping both the strategic orientation and implementation roadmap for the Integrated Sustainable Building Platform. By embedding multi-stakeholder perspectives, rigorous risk evaluation, and a structured change management strategy, the initiative has been designed to ensure both feasibility and long-term viability within the evolving smart building ecosystem.

By expanding our focus on these key elements, we have been able to anticipate and mitigate potential challenges, proactively engage stakeholders, and outline a comprehensive roadmap for the successful implementation of our Integrated Sustainable Building Platform.

Moreover, the integration of cross-functional collaboration, anticipatory risk management, and adaptive change leadership has yielded a resilient implementation strategy capable of navigating the complexity and volatility inherent in the smart buildings sector. This holistic approach not only reinforces the platform's strategic relevance but also aligns with broader sustainability imperatives and innovation trajectories within the built environment.

Module 2 surfaced critical operational challenges within JCI Digital, including fragmented decision-making processes, limited cross-functional collaboration, and an underutilization of data-driven insights. These findings underscored the need for a more integrated and adaptive approach to strategic problem-solving.

In response, a collaborative problem-solving framework synthesizing design thinking, scenario planning, and multi-criteria decision analysis will be developed. This hybrid model enables JCI Digital to approach complex challenges with greater inclusivity and analytical rigor, drawing on diverse stakeholder perspectives and structured evaluation techniques.

Further recommendations emerging from this module include:

- **Decision-Making Enhancements:** Establishing a centralized data analytics function to generate actionable insights, adopting agile project management methodologies to improve responsiveness, and embedding user-centric design principles to ensure stakeholder relevance and solution usability.
- **Cultural and Organizational Transformation:** Promoting a culture of continuous improvement through structured feedback loops and the creation of cross-functional innovation hubs. These mechanisms are designed to facilitate knowledge exchange, accelerate learning, and foster collaborative experimentation across the organization.

By integrating the strategic insights from Module 1 with the implementation strategies developed in Module 2, JCI Digital is well-positioned to lead the deployment of the Integrated Sustainable Building Platform and scale other innovation initiatives across the region. This alignment of vision, capability, and execution reinforces the organization's role as a sustainability-driven leader in the smart buildings' domain.

SSBR
PhD by Portfolio Module 3
Student Task Completion Checklist

Learning Outcome 1 (LO1): *Demonstrate knowledge of the most advanced frontiers of a field of work. In what way(s) does your work fulfil this learning outcome? Give a full explanation*

My research work demonstrates the learning outcome of advanced knowledge at the leading edge of digital solutions for sustainable and net-zero smart buildings. Central to this work is the design and strategic deployment of an Integrated Sustainable Building Platform, powered by Johnson Controls' OpenBlue ecosystem. This initiative directly engages with the most progressive developments in smart building technology and sustainability practice.

The platform integrates cutting-edge technologies to optimize building performance, reduce energy consumption, and enhance occupant well-being. Through the application of predictive algorithms and machine learning, the system uncovers operational patterns and efficiencies that conventional methods often overlook.

This proposal also reflects a comprehensive understanding of current industry trajectories, rising demand for sustainable infrastructure and customer centric approaches, integration of renewable energy sources, and the influence of ESG (Environmental, Social and Governance) metrics in investment and operational decision-making. It further incorporates strategic responses to global disruptions such as geopolitical instability, technological shifts, and the post-pandemic recalibration of urban and workplace design embedding resilience into both the platform and the broader business model.

Informed by my professional experience as a Customer Success Director for JCI Digital Solution, this work bridges academic inquiry with applied industry insight. It draws on my real-world knowledge of the operational challenges, strategic opportunities, and regional nuances that shape digital transformation in the built environment.

Finally, the platform's development and services are guided by a user-centric approach, incorporating feedback from building occupants and stakeholders to ensure relevance, usability, and long-term adoption. This emphasis on human-centered innovation reinforces the platform's potential to deliver meaningful impact across technical, environmental, and social dimensions.

Learning Outcome 2 (LO2): *Demonstrate the most advanced and specialized skills and techniques, including synthesis and evaluation, required to solve critical business problems and to extend or redefine professional practice. In what way(s) does your work fulfil this learning outcome? Give a full explanation*

My work exemplifies the highest level of professional practice by applying advanced, specialized techniques to solve complex business challenges and extend the boundaries of sustainable building management. Drawing on my expertise in digital solutions, customer success, data analytics, and sustainability, I have developed a comprehensive proposal for an Integrated Sustainable Building Platform, a transformative solution designed to reduce energy consumption, enhance building performance, and elevate occupant wellbeing through customer-centric services.

This platform integrates cutting-edge capabilities such as predictive analytics, real-time monitoring, and automated optimization, empowering building managers to make informed, proactive decisions. Beyond technical innovation, the proposal reflects strong collaborative problem-solving and strategic decision-making, addressing key industry pain points including fragmented data, system complexity, and the need for greater transparency.

Recognizing the diverse perspectives of stakeholders like owners, tenants, and employees, I've embedded change management strategies that highlight the platform's tangible benefits: cost efficiency, improved comfort, and measurable sustainability outcomes.

At its core, the proposal advocates for a paradigm shift toward customer-centric operational models, where data becomes the linchpin for long-term success. By aligning people, processes, and technology, the platform enables tailored service delivery, agile design execution, and robust documentation of evolving requirements—driving both operational excellence and enduring customer relationships.

The platform's architecture supports substantial energy savings and aligns with global sustainability imperatives. While intelligent buildings seemingly require higher upfront investment, they unlock long-term value through renewable energy adoption, enhanced energy management, and future-ready workplace design. This proposal underscores the strategic importance of energy efficiency and sustainability in modern building operations, paving the way for smarter, more resilient environments anchored on customer satisfaction.

Learning Outcome 3 (LO3): Demonstrate substantial authority, innovation, autonomy and professional integrity. In what way(s) does your work fulfil this learning outcome? Give a full explanation

My work exemplifies the integration of advanced strategic competencies, autonomous decision-making, and ethical leadership into sustainable business transformation. The work aligns with key research themes in sustainability studies, including system thinking, stakeholder-centric innovation, and the operationalization of ethical governance within complex organizational ecosystems

The development and deployment of a multifaceted business strategy in collaboration with Johnson Controls core values reflects deep system-level understanding. By applying frameworks and customer centric approaches, the initiative demonstrates **authoritative** command of strategic planning and its translation into actionable, scalable models. This aligns with doctoral research themes on strategic foresight, organizational agility, and adaptive governance in sustainability transitions.

The project redefines value creation by shifting focus from tangible to intangible assets echoing contemporary research on intellectual capital, brand equity, and relational value in sustainable enterprises. The introduction of a flexible execution model and bespoke digital solutions illustrates design-led **innovation** and technology-enabled transformation, both central to doctoral explorations of smart infrastructure and digital sustainability.

The leader's capacity for independent strategic decision-making and proactive adaptation to stakeholder feedback reflects high levels of strategic agency and leadership **autonomy**. These attributes are critical in this research examining distributed leadership, resilience in complex systems, and transformational change management.

It also upholds ethical standards through transparent communication and inclusive decision-making, reinforcing trust across stakeholder groups. Its emphasis on sustainability beyond economic metrics aligns with corporate responsibility, ethical stewardship, and multi-stakeholder value alignment. The integration of environmental, social, and governance (ESG) principles into strategic execution further **professional integrity**, responsible for innovation and sustainable organizational design.

Learning Outcome 4 (LO4): Develop new ideas or processes at the forefront of work. In what way(s) does your work fulfil this learning outcome? Give a full explanation

My work in this research introduces a series of new concepts and processes that position it at the forefront of sustainable building management. It reflects a strong commitment to innovation, strategic foresight, and the advancement of environmentally responsible and economically viable solutions.

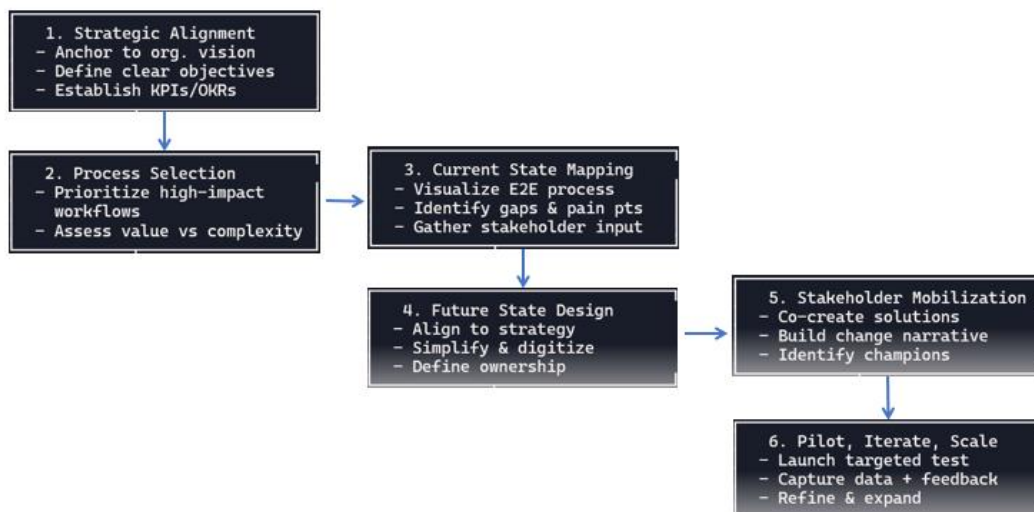
At the core of this work is the Integrated Sustainable Building Platform, a novel framework that synthesizes advanced technologies and sustainability principles to deliver a holistic approach to building operations. By integrating digital solutions, IoT infrastructure, data analytics, and

environmental design strategies packaged with enhanced customer service, enables the platform to optimize energy consumption, reduction of environmental impact, and occupant wellbeing driving customer satisfaction for long-term success.

The expansion strategy outlined in this work adopts a data-informed approach to market selection for high growth potential and increasing demand for sustainable building solutions. This strategic direction not only diversifies revenue streams but also contributes to the broader global agenda of environmental stewardship and climate resilience. Designed to catalyze meaningful organizational change facilitating modernization without extensive capital reinvestment. This approach maximizes energy savings and operational efficiency while minimizing disruption.

The proposal demonstrates a comprehensive understanding of current industry dynamics, emerging trends, and future challenges. It emphasizes proactive innovation and anticipatory design, aligning with scholarly discourse on sustainable development and smart infrastructure. Furthermore, the integration of sustainability principles from the early stages of construction planning enhances project outcomes by promoting efficient, context-sensitive design solutions.

Johnson Controls at a glance



Creating a new class of smart, healthy & sustainable buildings

Sustainability & energy efficiency

Track, control and measure your building's energy usage and emissions with AI enabled optimization



Baseline energy performance and reduce energy spend



Decrease carbon footprint and track to net zero goals



Optimize cost and automate central utility plant operations

Space performance & productivity

Drive optimal performance in the workplace; across occupants, spaces and operations



Improve space utilization by monitoring occupancy and equipment usage



Improve occupant wellness by optimizing indoor air quality



Leverage sensors and mobile technology to create an experiential workplace

Operational efficiency & equipment optimization

Smart facility management - operational consistency, risk mitigation and lower lifetime costs across your assets & building portfolio



Enable 24/7 monitoring of equipment performance and alarm management



Leverage proactive and predictive maintenance including work orders



Optimize Remote Operating Center (ROC) efficiency with 3D Twin enabled command center

Security, safety & compliance

Holistic management of all systems and processes critical to the safety and security of your building, people and assets



Single view of building asset security information



Recommendations and control - with automated response on intrusion or breaches



Automated efficiency and compliance of security operations



Smart Building Platform

Leverage a scalable and cybersecure ecosystem of edge, cloud and digital twin technology to drive innovation



Smart edge platform with suite of connectors and software development (SDK) to build new integrations



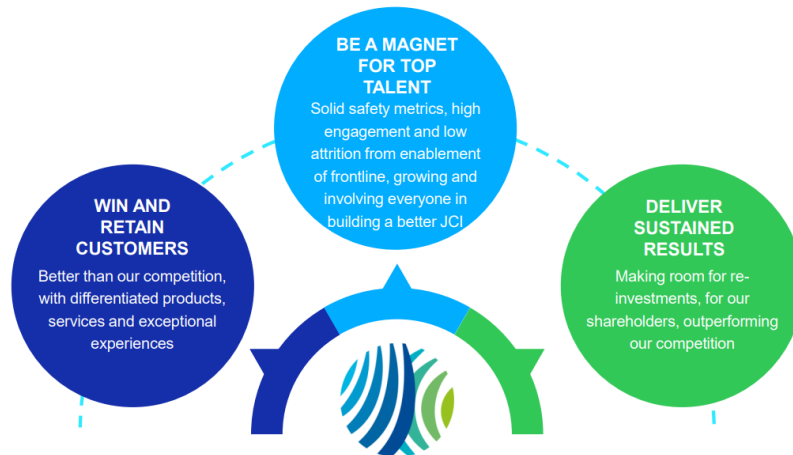
Cloud data platform to clean, aggregate, tag and normalize data



Secure APIs to access contextualized data and build custom experiences

OUR OPPORTUNITY

What winning looks like



Achieved Goals: FY21-24 Laid Solid Foundations

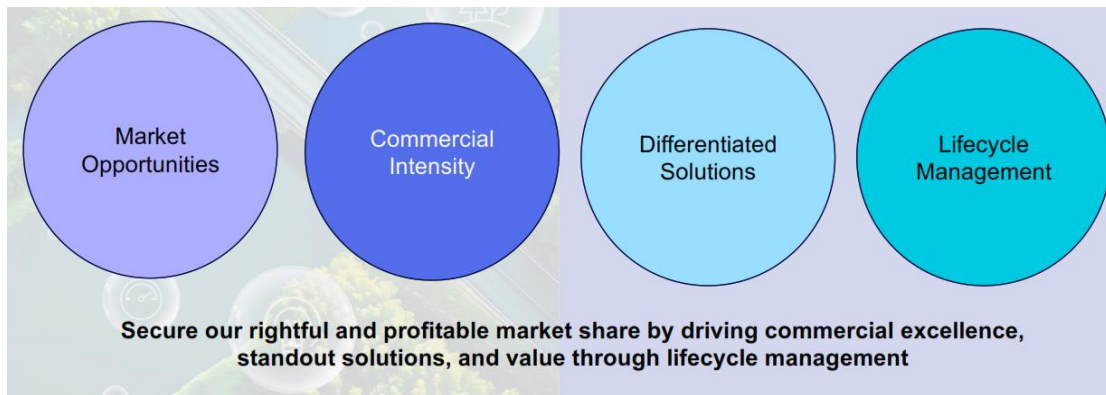
- Created **market-backed** portfolio of OpenBlue **SaaS offerings**
- Acquired leading **IWMS** capabilities with FM:Systems and **integrated** FM-OB as a unified organization
- Provided technological backbone for JCI **Connected Services**
- Boosted **cybersecurity** and **edge computing** w/ Tempered & Foghorn
- Grew **revenues** double digit and **GM** to 50%, **reducing losses** by 25 p.p.

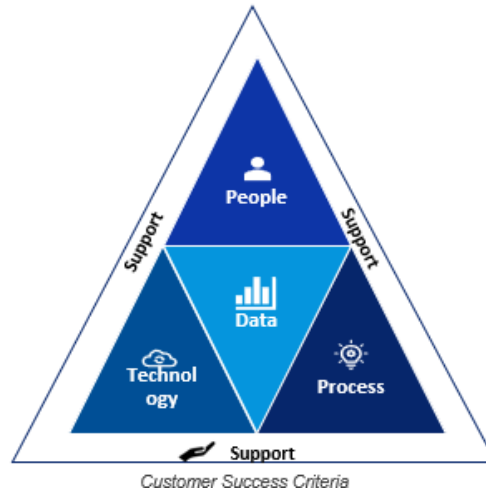
Step Change: FY25-27 Scale and Reach Profitability

- **Scale** existing offerings via new GTM motions, cross/up-sell, and synergies
- **Launch** new offerings in industry and professional services, delivering more **AI-enabled** outcomes
- Complete marketing, branding, and **commercial integration**
- Add technology & GTM **partnerships**
- Unify product & technology **platform**
- Create a united **high-performing** team
- Expand **topline** and margins to become **EBIDTA positive** by FY25

North Star: FY28+ Achieve Market Leadership

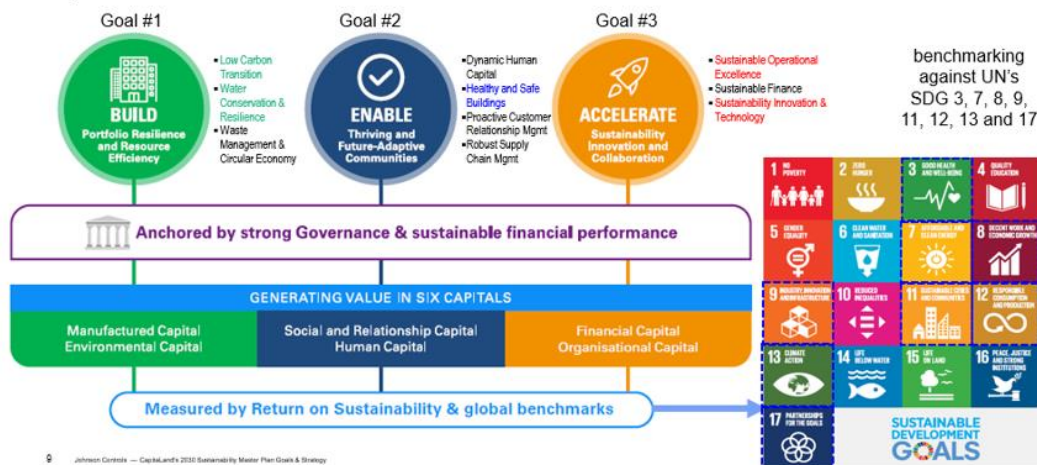
- Become the **undisputed global leader** for smart buildings IoT platforms
- Grow organically thanks to **repeatable, recurring, and high-margin** offerings
- Extend the portfolio via **inorganic growth** to add scale or capabilities
- Develop additional revenue streams via **new business models** (e.g., Data-as-a-Service, Building Operating Systems)
- Simplify and enhance **digital capabilities** across JCI
- Become a significant contributor to JCI **enterprise value** with RR >\$250M and EBIDTA margin >25%

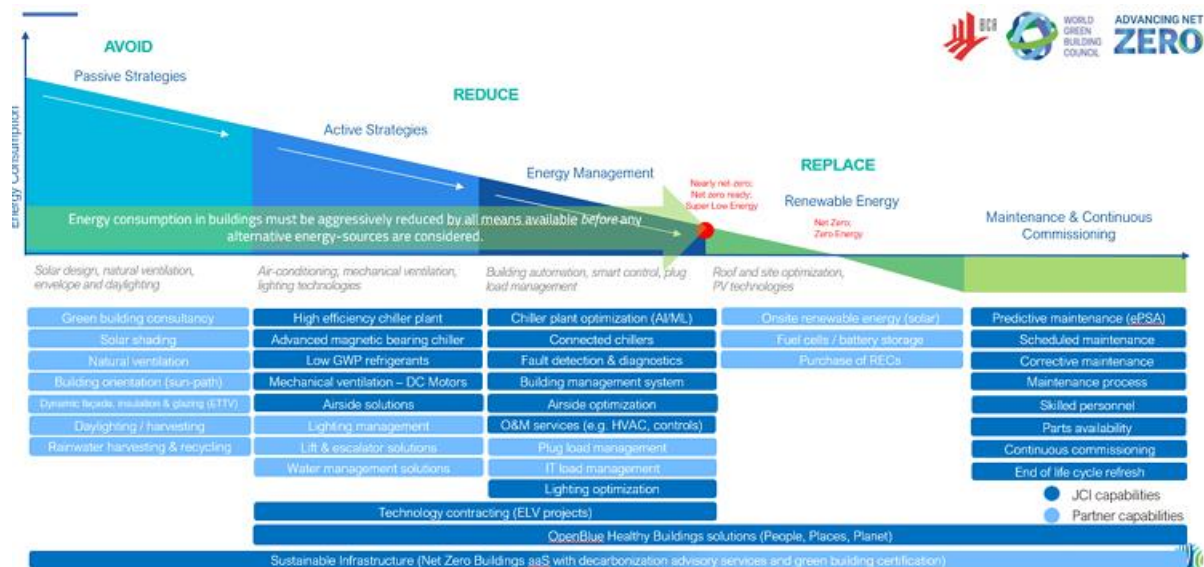




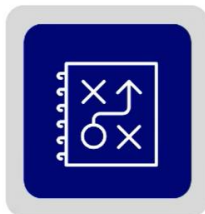
2030 Sustainability Master Plan Goals

Commit to stay nimble and review our sustainability goals and strategy every two years in line with shifts in the global landscape.





What is a business system?



It's how we do what we do. It's **how we win**.

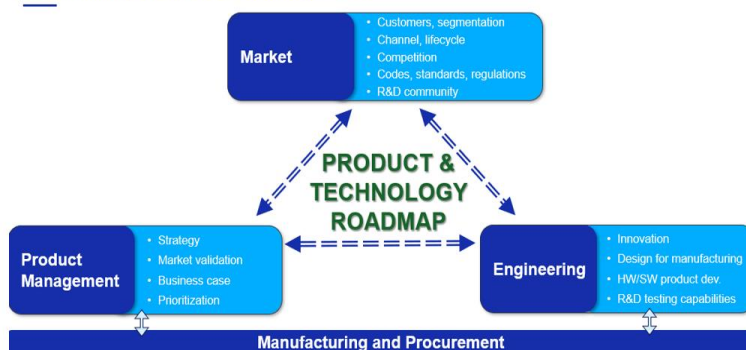


It's a global and cross-functional language and methodology for **how we communicate and collaborate to win**.



The winner is the company that is the most capable: both **capable, empowered front line people and processes**.

Development cycle driven by collaboration and synthesis across market, engineering and product management



Differentiated Products Position Us to Win

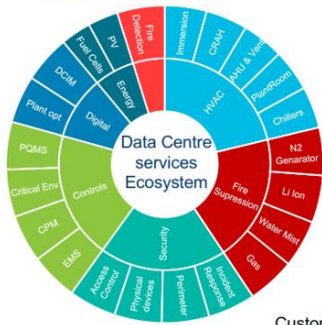
Secular trends introduce new customer needs, driving demand for new products:

- Sustainability:** Heat pumps, refrigerants, carbon footprint, etc.
- Digital:** Connectivity and software as a service
- Data Centers:** Global demand is growing fast with AI demand and power intensity increases

Technology is rapidly evolving, and products become more **complex**, requiring more **support** through the lifetime of the system.

Winning product portfolios strengthen our position in a dynamic market and are critical to unlock downstream lifecycle opportunities.

Integrated Solutions-



Integrated Solutions is modularization of JCI's building systems offerings through Solution Modules to meet customer needs



- Customer**
1. OPEN architecture of Data convergence
 2. Reduces risk of interdependencies
 3. Simplified operation >> Lifecycle value

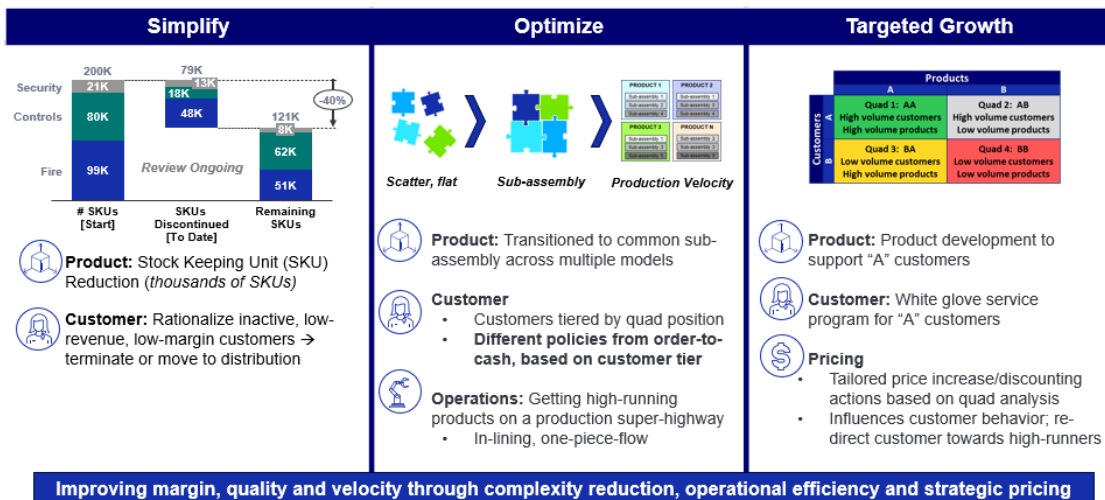
JCI

1. Maximize Entitlement upfront
2. Increased lifecycle revenue & margin

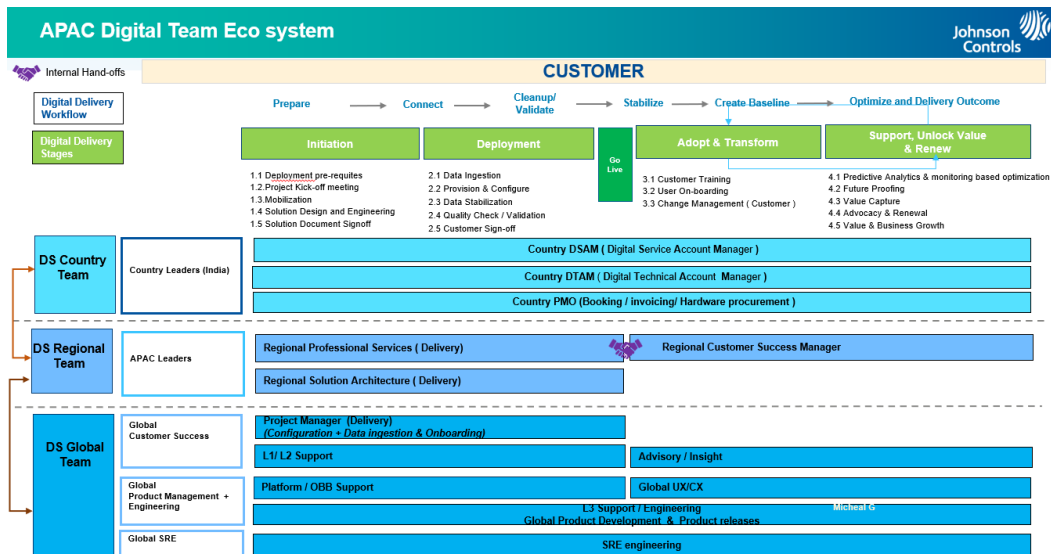
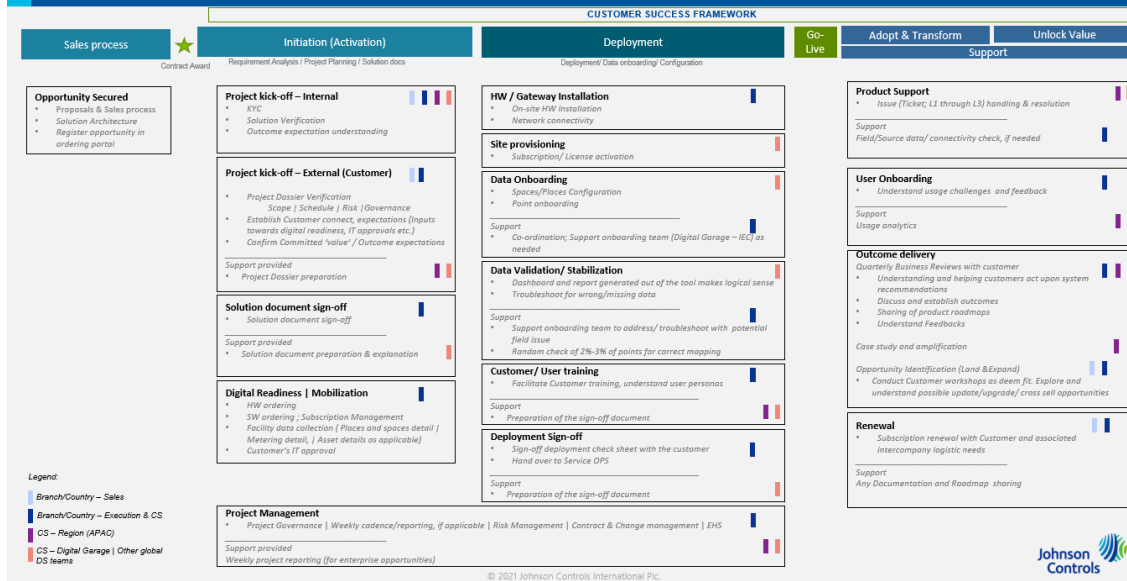
Lifecycle solution approach of 'Need Assessment - Solutioning - Execution - Service'



Reducing complexity and improving cost and velocity through 80/20



Executing Customer Success as ONE JCI: Teams, Roles and Responsibilities



Key Roles and Responsibilities - Branch

Role : DSAM (Digital Service Account Manager) – Branch

Responsibilities

1. Responsible for end-to-end project success leading to life c
2. Manage customer relationship throughout the project life c
3. Support site survey and data gathering for deployment pre
4. Co-ordinate with 3rd party vendors for site assessment and
5. Facilitate digital readiness of the facility/ site for deployment
6. Customer IT approvals & network access for data onboardi
7. Hardware procurement (like OBB, IAC etc) and complete in
8. Troubleshoot and fix data and site related issues
9. Support global onboarding teams (IEC) for Data ingestion a
10. Manage project delivery schedule and budget
11. Obtain customer sign-off and subscription start on delivery
12. Issuance of inter-co PO and completing it in DOP (Digital O
13. Maintain data quality and integrity of the platform throug
14. Support customer on change management process and pla
15. Drive Outcomes/ RoI from the deployed platform and com
16. Run Delivery progress meeting during delivery phase and C

Key Roles and Responsibilities - Branch

Role : DTAM (Digital Technical Account Manager) - Branch

Responsibilities

1. Technical advisor for customer leading to digital business growth.
2. Influence product roadmap for customer digital growth strategy and budget
3. Ensure data health of the solution ; identify and fix the cause of issues / data loss.
4. Drive user onboarding with additional training / support, when required.
5. Continuous assessment for higher ROI , increased energy savings and higher platform adoption
6. Develop simple custom report, widgets, analysis for customer business requirement
7. Fine tune FDD* diagnosis and cost expression when required .
8. Technical support for QBR / MOR and strategy discussion with customer
9. Develop and execute Value delivery for continual success
10. Provide ongoing configuration* due to changes in site (Un-mapping old points and re-onboarding existing points)
11. Support customer on change management process and platform adoption plans

* Notes of clarification:

- **Ongoing configuration** – DTAM services are limited to minor adds/moves/changes; New buildings or large configuration that impacts subscription price would be handed over to Sales team for expansion opportunity.
- **Complex FDD** with additional configurations to be evaluated for cost impact / Variation Order
- **Complex reports** to be evaluated for cost impact / Variation Order

Strategic Drivers	Leading Self	Leading Teams	Leading Managers	Leading the Enterprise
Build a Performance Culture	Building an Effective Team	Building Effective Leaders	Building Effective Leaders	Building Effective Leaders
	Delegating Responsibility	Empowering the Organization	Empowering the Organization	Empowering the Organization
	Coaching Others	Coaching and Developing Talent	Coaching and Developing Talent	Coaching and Developing Talent
	Customer Orientation	Customer Focus	Customer Focus	Customer Focus
	Bottom Up Innovation	Inspiring Bottom Up Innovation	Inspiring Bottom Up Innovation	Inspiring Bottom Up Innovation
Drive Operational Improvements	Digital Acumen	Digital Leadership	Digital Leadership	Digital Leadership
	Execution Discipline	Driving Execution and Results	Driving Execution and Results	Driving Execution and Results
	Influencing with Impact	Driving Buy-In	Driving Buy-In	Driving Buy-In
	Adaptability	Leading Change	Leading Change	Leading Change
Create Growth Platforms	Entrepreneurship	Entrepreneurship	Entrepreneurship	Entrepreneurship
	Financial Savvy	Financial Savvy	Financial Savvy	Financial Savvy
	Business Acumen	Business Acumen	Business Acumen	Business Acumen
	Decision Making	Operational Decision Making	Operational Decision Making	Operational Decision Making
	Global Acumen	Global Acumen	Global Acumen	Global Acumen
	Managing Work	Establishing Strategic Clarity	Establishing Strategic Clarity	Establishing Strategic Clarity
	Collaboration	Building Partnerships	Cultivating Networks and Partnerships	Cultivating Networks and Partnerships

Leaders Set the Tone

- Leader's actions shape our culture and guide our teams
- Carry our values forward



Doing the Right Thing

- Integrity is our core value and shared responsibility
- Every decision, big or small, builds our reputation and ensures lasting success – there are no shortcuts



Speak Up

- Raising concerns early protects our company and strengthens trust
- Your voice matters and is protected – no retaliation

